

CLAIMS

1 1. A method for displaying at least first and second incoming pictures in sequence,
2 comprising the steps of:
3 separating the first picture into sets of first picture segments, each set associated with a
4 different primary color;
5 interleaving the first picture segments in a first color sequence;
6 separating the second picture into sets of second picture segments, each set associated
7 with a different primary color;
8 interleaving the second picture segments in a second color sequence in which at least the
9 first and last second picture segments are each of different color than the first and last first
10 picture segments, respectively, and
11 sequentially displaying the first picture segments in the first color sequence; and
12 thereafter
13 sequentially displaying the second picture segments in the second color sequence.

1 2. The method according to claim 1 wherein the second color sequence is shifted by
2 one primary color from the first color sequence.

1 3. The method according to claim 1 wherein the step of separating the first picture
2 includes the step of imparting to each of the sets of first picture segments a different one of a red
3 (R), green (G) and blue (B) primary colors.

1 4. The method according to claim 1 wherein the step of separating the second picture
2 includes the step of imparting to each of the sets of second picture segments a different one of a
3 red (R), green (G) and blue (B) primary colors.

1 5. The method according to claim 1 wherein the step of separating the first picture
2 into sets of first picture elements includes the step of dropping a segment of a primary color and
3 wherein the step of separating the second picture into sets second picture elements includes
4 dropping a segment of a different primary color than the segment dropped for the first picture.

1 6. The method according to claim 1 wherein at least one set of first picture segments
2 associated with a primary color has a different number of segments than a set of first picture
3 segments associated with a different primary color and wherein at least one set of second picture
4 segments associated with a primary color has a different number of segments than a set of second
5 picture segments associated with a different primary color.

1 7. A method for successively displaying color pictures such that each picture
2 appears during a picture interval, comprising the steps of:
3 separating each successive picture into sets of segments, the number of sets of segments
4 corresponding to a prescribed number of primary colors;
5 imparting each of the primary colors in a prescribed sequence to a beam of light directed
6 onto a light modulator, said each primary color imparted simultaneously with the application of a
7 control signal to the light modulator causing the light modulator to modulate the segment of the
8 primary color for display on a display screen; and
9 changing the sequence of primary colors imparted to the light directed onto the light
10 modulator upon each next successive picture so that the primary color associated with at least a
11 first and a last segment of said each next successive picture differs from the primary color
12 associated with each of the first and last segments, respectively, of a preceding picture.

1 8. The method according to claim 7 wherein the imparting step comprises the steps
2 of:
3 interposing a color wheel having a plurality of red, green and blue interleaved color
4 windows in the beam of light striking the light modulator so that the beam of light will pass
5 through a color window and onto the light modulator;
6 rotating the color wheel at a non-integer number of revolutions per picture interval to
7 impart a prescribed sequence of red (R), green (G) and blue colors to the light directed onto the
8 light modulator.

1 9. The method according to claim 7 wherein the changing step includes the step of
2 arranging the color windows in the color wheel such that as the wheel rotates, the sequence of red

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3 green and blue colors imparted to the light beam striking the light modulator changes for each
4 picture.

5
6 10. A sequential color display system for displaying successive pictures, comprising:
7 a light source for producing a light beam;
8 a light modulator lying within the optical path of the light beam for modulating the light
9 beam onto a display screen;

10 means for separating each successive picture into sets of segments, the number of sets of
11 segments corresponding to a prescribed number of primary colors, and for applying control
12 signals to a light modulator to cause the light modulator to generate said sets of segments such
13 that each segment of a set is interleaved between segments of other sets;

14 a color sequencing mechanism interposed between the light source and the light
15 modulator for imparting to the light beam each of the primary colors in a prescribed sequence,
16 said each primary color imparted simultaneously with the application of said each segment to the
17 modulator, the color sequencing mechanism changing the sequence of primary colors imparted to
18 the light directed onto the light modulator upon each next successive picture so that the primary
19 color associated with at least a first and a last segment of said each next successive picture each
20 differs from the primary color associated with each of the first and last segments, respectively, of
21 a preceding picture..

1 11 The system according to claim 10 wherein the color sequencing mechanism
2 comprises a color wheel having a plurality of color windows arranged to impart a separate one of
3 a red, (R), a green (G) and a blue (B) color to the light directed onto the light modulator upon
4 rotation at a non-integer number of rotations per picture interval.